Sub D3

25. (amended) A method for forming multiple copies of at least one double stranded polynucleotide ("polynucleotide"), said polynucleotide comprising a single stranded target polynucleotide sequence ("target sequence") and its complementary sequence (complementary sequence), said method having a positive internal control, said method comprising:

(a) treating a sample suspected of containing one or more of said double stranded polynucleotides with (i) at least two oligonucleotide primers capable of hybridizing to a portion of each target sequence and its complementary sequence suspected of being present in said sample under conditions for hybridizing said primers to and extending said primers along said target sequence and said complementary sequences, wherein said primers are selected such that the extension product formed from one primer (primer A), when it is dissociated from its complement, can serve as a template for the formation of the extension product of another primer (primer B), (ii) a control polynucleotide, as a template to which [one of said primers] either primer A or B hybridizes except for 1-10 nucleotides of the primer at the 3'-end [of said one of said primers] (control primer), and (iii) a 3' to 5' exonuclease wherein said primers extend, respectively, along said target sequence and said complementary sequence and [said one of said primers] the control primer extends along said control polynucleotide only after said 1-10 nucleotides are degraded by said 3' to 5' exonuclease,

A'

(b) dissociating primer extension products from their respective templates to produce single stranded molecules and

(c) treating the single stranded molecules produced in step (b) with the primers of step (a) under conditions such that a primer extension product is formed using the single strands produced in step (b) as templates, resulting in amplification of the target sequences and complementary sequences if present, said conditions allowing for the extension of [said one of said primers] the control primer along said control polynucleotide to provide said positive internal control.

26. (amended) The method of Claim 25 wherein said [one of said primers] primer A or primer B is fully complementary to that portion of said target sequence to which it hybridizes

and is complementary to that portion of said control polynucleotide to which it hybridizes except for said 1 to 10 nucleotides at the 3'-end thereof.

27. (amended) The method of Claim 25 wherein a modified oligonucleotide primer is included in said combination wherein said modified oligonucleotide primer is substantially identical to said [one of said primers] primer A or primer B except for a chemical modification at its 3'-end that prevents degradation, by said 3' to 5' exonuclease, of said 1 to 10 nucleotides.

30. (amended) The method of Claim 25 wherein said [one of said primers] primer A or primer B hybridizes to said control polynucleotide except for 3-5 nucleotides at the 3'-end thereof.

Kindly add the following new claim 58.

--58. In a method for forming multiple copies of a target sequence of a target polynucleotide, said method comprising the step of forming extension products of an oligonucleotide primer at least along said target sequence or along an oligonucleotide primer extended by a primer complementary to the target polynucleotide, wherein said primers are the same or different, said extension products being copies of said target sequence, the improvement which comprises forming said extension products in the presence of a second polynucleotide, to which said oligonucleotide primer hybridizes except for the 3'-end of said oligonucleotide primer, under conditions wherein the extension of said oligonucleotide primer along said second polynucleotide is controlled relative to the extension of said oligonucleotide primer along said target sequence.--

REMARKS

Reconsideration of this application as presently amended is respectfully requested in view of the following discussion. A petition for an extension of time of one month for responding to